higher risk of CVD. Numerous studies in the past have shown that lowering of plasma triglycerides and total cholesterol, in particular LDL and VLDL and increasing HDL cholesterol help in preventing cardiovascular diseases.

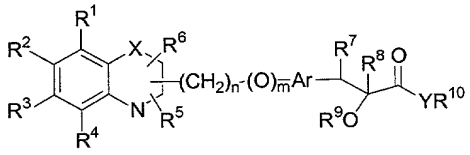
[0011] Peroxisome proliferator activated receptors (PPAR) are members of the nuclear receptor super family. The gamma (γ) isoform of PPAR (PPARγ) has been implicated in regulating differentiation of adipocytes (*Endocrinology,* **135** (1994) 798-800) and energy homeostasis (*Cell,* **83** (1995) 803-812), whereas the alpha (α) isoform of PPAR (PPARα) mediates fatty acid oxidation (*Trend. Endocrin. Metab.*, **4** (1993) 291-296) thereby resulting in reduction of circulating free fatty acid in plasma (*Current Biol.* **5** (1995) 618 - 621). PPARα agonists have been found useful for the treatment of obesity (WO 97/36579). It has been recently disclosed that compounds which are agonists for both PPARα and PPARγ are suggested to be useful for the treatment of syndrome X (WO 97/25042). Similar effect between the insulin sensitizer (PPARγ agonist) and HMG CoA reductase inhibitor has been observed which may be useful for the treatment of atherosclerosis and xanthoma (EP 0 753 298).

[0012] It is known that PPARγ plays an important role in adipocyte differentiation (*Cell,* **87** (1996) 377-389). Ligand activation of PPAR is sufficient to cause complete terminal differentiation (*Cell,* **79** (1994) 1147-1156) including cell cycle withdrawal. PPARγ is consistently expressed in certain cells and activation of this nuclear receptor with PPARγ agonists would stimulate the terminal differentiation of adipocyte precursors and cause morphological and molecular changes characteristics of a more differentiated, less malignant state (*Molecular Cell*, (1998), 465-470; *Carcinogenesis*, (1998), 1949-53; *Proc. Natl. Acad. Sci.,* **94** (1997) 237-241) and inhibition of expression of prostate cancer tissue (*Cancer Research* **58** (1998) 3344-3352). This would be useful in the treatment of certain types of cancer, which express PPARγ and could lead to a quite nontoxic chemotherapy.

[0013] Leptin resistance is a condition wherein the target cells are unable to respond to leptin signal. This may give rise to obesity due to excess food intake and reduced energy expenditure and cause impaired glucose tolerance, type 2 diabetes, cardiovascular diseases and such other interrelated complications. Kallen *et al* (*Proc. Natl. Acad. Sci.* (1996) 93, 5793-5796) have reported that insulin sensitizers which

perhaps due to the PPAR agonist expression lower plasma leptin concentrations. However, it has been recently disclosed that compounds having insulin sensitizing property also possess leptin sensitization activity. They lower the circulating plasma leptin concentrations by improving the target cell response to leptin (WO 98/02159).

[0014] In our International publication Nos. WO 99/20614 and WO 00/66572 we have disclosed and described the novel compounds of the formula (II),



(II)

wherein the groups R^1, R^2, R^3, R^4 and the groups R^5 and R^6 when attached to carbon atom, may be same or different and represent hydrogen, halogen, hydroxy, nitro, cyano, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkylthio, alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, carboxylic acid or its derivatives, or sulfonic acid or its derivatives; one or both of R^5 and R^6 may also represent an oxo group when they are attached to carbon atom; R^5 and R^6 when attached to nitrogen atom represent hydrogen, hydroxy, formyl or unsubstituted or substituted groups selected from alkyl, cycloalkyl, alkoxy, cycloalkoxy, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, acyl, acyloxy, amino, acylamino, monoalkylamino, dialkylamino, arylamino, aralkylamino, aryloxy, aralkoxy, heteroaryloxy, heteroaralkoxy, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, alkylthio groups, carboxylic acid derivatives, or sulfonic acid derivatives; X represents a heteroatom selected from oxygen, sulfur or NR^{11} where R^{11} represents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, acyl, alkoxycarbonyl, aryloxycarbonyl or aralkoxycarbonyl groups; Ar represents an unsubstituted or substituted divalent single or fused aromatic or heterocyclic group; R^7 represents hydrogen atom, hydroxy, alkoxy, halogen, lower alkyl, unsubstituted or substituted aralkyl group or forms a bond together with the adjacent group R^8; R^8

represents hydrogen, hydroxy, alkoxy, halogen, lower alkyl group, acyl or unsubstituted or substituted aralkyl or R^8 forms a bond together with R^7; R^9 represents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, alkoxycarbonyl, aryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl or heteroaralkyl groups; R^{10} represents hydrogen or unsubstituted or substituted groups selected from alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl or heteroaralkyl groups; Y represents oxygen or NR^{12}, where R^{12} represents hydrogen, alkyl, aryl, hydroxyalkyl, aralkyl, heterocyclyl, heteroaryl or heteroaralkyl groups; R^{10} and R^{12} together may form a 5 or 6 membered cyclic structure containing carbon atoms, atleast one nitrogen atom and which may optionally contain one or two additional heteroatoms selected from oxygen, sulfur or nitrogen; the linking group represented by -$(CH_2)_n$-$(O)_m$- may be attached either through a nitrogen atom or a carbon atom; n is an integer ranging from 1-4 and m is an integer 0 or 1. We have also described the processes for preparing the compounds of formula (II).

[0015] The pharmaceutically acceptable salts of the general formula (I) have significant formulation and bulk handling advantages in view of the their stability.

Objective of the Invention

[0016] The main objective of the present invention is therefore to provide pharmaceutically acceptable salts of β-aryl-α-oxysubstituted alkyl carboxylic acids of the formula (I), their derivatives, their analogs, their tautomeric forms, their stereoisomers, their polymorphs, their pharmaceutically acceptable solvates and pharmaceutical compositions containing them or their mixtures having good stability and solubility, which can be used for the treatment and/or prophylaxis of diseases related to increased levels of lipids, especially to treat hypertriglyceridemia and to lower free fatty acids, for the treatment and/or prophylaxis of diseases described as Syndrome-X, which include hyperlipidemia, hyperinsulinemia, obesity, insulin resistance, insulin resistance leading to type 2 diabetes and diabetic complications thereof, for the treatment of diseases wherein insulin resistance is the pathophysiological mechanism, for the treatment of hypertension, atherosclerosis and coronary artery diseases with better efficacy, potency and lower toxicity.

[0017] Another objective of the present invention is to provide pharmaceutically acceptable salts of β-aryl-α-oxysubstituted alkyl carboxylic acids of the formula (I) and